

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended) A device comprising:

an inlet for receipt of a sample,

a first chamber coupled to the inlet, the first chamber defined by a bottom support, a common intermediate member, and a first spacer and including at least one affinity region;

a second chamber ~~disposed adjacent to~~ stacked on top of the first chamber, the first chamber and second chamber sharing a common intermediate member, the common intermediate member having at least one via formed in the common intermediate member, the second chamber defined by the common intermediate member, a top member and a second spacer and including an assay chip comprising an array of addressable electrodes; and

an outlet coupled to the second chamber.

Claim 2 (original) The system of claim 1 wherein the first chamber further includes a plurality of electrodes.

Claim 3 (original) The system of claim 1 wherein the at least one affinity region comprises an affinity matrix.

Claim 4 (original) The system of claim 1 wherein the at least one affinity region comprises a membrane.

Claim 5 (original) The system of claim 1 further comprising an electrode adjacent to the at least one via.

Claim 6 (original) The system of claim 1 wherein the at least one affinity region has an affinity to nucleic acids.

Claim 7 (original) A method of using the device of claim 1 wherein the first chamber is used to amplify nucleic acids contained in the sample.

Claim 8 (original) The method of claim 8 wherein the amplified nucleic acid is eluted through the via and into the second chamber.